

Remarks

Reconsideration of this Application is respectfully requested.

Claims 1, 3-10, 13, and 25-50 are pending in the application, with claims 1, 8, 9, 10, 31, 38 and 44 being the independent claims. Claims 1, 8, 9, 10, 13, 31, 38 and 44 have been amended. Support for the amendments to the claims may be found throughout the specification and the originally filed claims. Applicants respectfully submit that the amendments be entered after final rejection as they place the claims in condition for allowance. 37 C.F.R. § 1.116.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Statement of Substance of Examiner Interview

Applicants thank Examiner Harris for the courtesy extended to their representatives in a telephonic interview on December 4, 2006. The Examiner's Interview Summary accurately reflects the substance of the interview, and should be made of record. The amendments made herein are in accordance with suggestions made by Examiner Harris during the interview.

Rejections Under 35 U.S.C. § 112, First Paragraph (enablement)

The Examiner rejects claims 1, 3-10, 13 and 29-31, 36-44, 49 and 50 under 35 U.S.C. § 112, first paragraph, allegedly because the specification does not reasonably provide enablement commensurate with the scope of the claimed invention. The Examiner contends that by virtue of the language "capable" in the claims, there is not

assuredness that the mutant molecules will do as the claims assert. The Examiner also alleges that there is no guidance on how complementary sequences could encode a polypeptide. Finally, the Examiner contends that there is insufficient guidance for implementing the method of claim 13 with a mutant polypeptide encoded by a nucleic acid of claim 1, in particular those of parts (e) and (f) of claim 1. Applicants respectfully traverse this rejection.

Solely to advance prosecution, and not in acquiescence of the Examiner's rejection, Applicants have amended the claims. In particular, Applicants have amended the claims to remove the "capable" language objected to by the Examiner in claims 1, 31, 38 and 44. Applicants have also incorporated the term "fully" in claims 1, 8, 9, 10, 31, 38 and 44, as suggested by the Examiner during the telephonic interview on December 4, 2006. Finally, Applicants have amended claims 13 and 44 to recite that the polypeptide is encoded by the polynucleotide of parts (a)-(e) of the claims.

Accordingly, Applicants believe that these amendments place the claims in condition for allowance and respectfully request that the Examiner reconsider and withdraw the rejection.

Rejection Under 35 U.S.C. § 112, First Paragraph (written description)

The Examiner rejects claim 10 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants respectfully traverse this rejection.

The Examiner contends that the Applicants' specification is remiss of sufficient information, guidance and sincere contemplation of an oligonucleotide probe or primer

of at least 100 contiguous nucleotides in length. The Examiner does not note significant information in the specification that leads the skilled artisan to such contemplation.

To satisfy the written description requirement of 35 U.S.C. § 112, first paragraph, Applicants must convey with reasonable clarity *to those skilled in the art* that, as of the effective filing date, Applicants were in possession of the invention. See, *Vas-Cath, Inc. v. Mahurkar*, 19 U.S.P.Q.2d 1111, 1117 (Fed. Cir. 1991). "The invention claimed does not have to be described in *ipsis verbis* in order to satisfy the description requirement of § 112." *In re Wertheim*, 191 U.S.P.Q. 90, 96 (CCPA 1976). Rather, the disclosure need only reasonably convey to persons skilled in the art that the Applicants had possession of the subject matter in question; how the specification accomplishes this is not material. See, *In re Edwards*, 196 U.S.P.Q. 465, 467 (CCPA 1978) ("When viewed in the context of what the parent application actually describes, the PTO has, in effect, done nothing more than argue lack of literal support. The burden of showing that the claimed invention is not described in the application rests on the PTO in the first instance, and it is up to the PTO to give reasons why a description not in *ipsis verbis* is insufficient."). Based on the applicable case law, Applicants' specification, when read as a whole, by one skilled in the art, reasonably conveys that they were in possession of oligonucleotides of at least 100 nucleotides in length of SEQ ID NO:3.

The present specification, at page 21, lines 17-25, discloses fragment sizes by a mathematical formula. The Examiner, however, appears to require that the Applicants' claimed fragment sizes be described in *ipsis verbis*. Applicants reassert that there is no such requirement in the patent law. Applicants respectfully point out that they are fully within their rights to represent their invention by formula, as the law clearly establishes

that one may show that one is in possession of the invention by describing the invention, with all its claimed limitations by such descriptive means as "words, structures, figures, diagrams, *formulas*, etc., that fully set forth the claimed invention." *See Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997) (emphasis added). Applicants reassert that a person of ordinary skill in the art would envision each and every fragment size because the fragment size is the only variable and the formula teaches each and every fragment size. Thus, a person of ordinary skill in the art would understand that Applicants were in possession of fragments of at least 100 nucleotides in length of SEQ ID NO:3.

Moreover, a person of ordinary skill in the art, reading the specification, would further understand that Applicants were in possession of fragments of 100 nucleotides in length of SEQ ID NO:3 by virtue of the disclosure at page 10, line 29, through page 11, line 7, of the specification. This portion of the specification discloses fragments of 100 nucleotides in length of SEQ ID NO:3. Thus, the specification expressly contemplates fragments of this size for SEQ ID NO:3. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Double Patenting Rejection

The Examiner provisionally rejects claims 1, 3-7 and 25-50 under 35 U.S.C. § 101 as claiming the same invention as that of claims 51-55 of copending Application No. 10/623,813. The Examiner asserted that Applicants have not supplied corresponding SEQ ID NOS for the deposits in claims 51-55 and consequently it is difficult to assess

which sequences are different than the others. Applicants respectfully traverse this rejection.

Applicants respectfully submit that claims 1, 3-7, and 25-50 are not directed to the same invention of claims 51-55 of copending Application No. 10/623,813. Claims 51-55 are directed to polynucleotide sequences contained in ATCC Deposit Nos. PTA-4611 and PTA-4610, corresponding to SEQ ID NOS:83 and 84, respectively, in Application No. 10/623,813. The deposited polynucleotides relate to mouse and human Dnmt3a2, which encode short isoforms of mouse and human Dnmt3a. Thus, a rejection under 35 U.S.C. § 101 is improper and Applicants respectfully request withdrawal of the rejection.

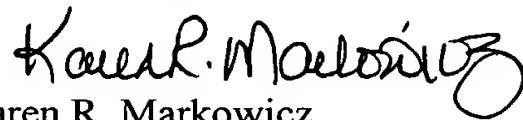
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned directly at (202) 772-8637.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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